

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT (PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>P200201035 WO</b>	<b>FOR FURTHER ACTION</b>		See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. <b>PCT/EP 03/09563</b>	International filing date ( <i>day/month/year</i> ) <b>26.08.2003</b>	Priority date ( <i>day/month/year</i> ) <b>16.09.2002</b>	
International Patent Classification (IPC) or both national classification and IPC <b>H04L29/06</b>			
Applicant <b>TELEFONAKTIEBOLAGET L M ERICSSON (publ) et al.</b>			
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 10 sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of    sheets.</p>			
<p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> <li>I    <input checked="" type="checkbox"/> Basis of the opinion</li> <li>II   <input type="checkbox"/> Priority</li> <li>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</li> <li>IV   <input checked="" type="checkbox"/> Lack of unity of invention</li> <li>V    <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</li> <li>VI   <input type="checkbox"/> Certain documents cited</li> <li>VII <input type="checkbox"/> Certain defects in the international application</li> <li>VIII <input type="checkbox"/> Certain observations on the international application</li> </ul>			
Date of submission of the demand  <b>11.03.2004</b>		Date of completion of this report  <b>23.09.2004</b>	
Name and mailing address of the international preliminary examining authority:  <div style="display: flex; align-items: center;"> <div>             European Patent Office              D-80298 Munich              Tel. +49 89 2399 - 0 Tx: 523656 epmu d              Fax: +49 89 2399 - 4465           </div> </div>		Authorized Officer  <b>Lebas, Y</b>  Telephone No. +49 89 2399-8980	



**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/EP 03/09563

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-29 as originally filed

**Claims, Numbers**

1-22 as originally filed

**Drawings, Sheets**

1/4-4/4 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

## IV. Lack of unity of invention

1. In response to the invitation to restrict or pay additional fees, the applicant has:

- ☐ restricted the claims.  
☐ paid additional fees.  
☐ paid additional fees under protest.  
☒ neither restricted nor paid additional fees.

2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is

- ☐ complied with.  
☒ not complied with for the following reasons:

**see separate sheet**

4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:

- ☐ all parts.  
☒ the parts relating to claims Nos. 1-12 .

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	2-9
	No: Claims	1, 10-12
Inventive step (IS)	Yes: Claims	
	No: Claims	1-12
Industrial applicability (IA)	Yes: Claims	1-12
	No: Claims	

2. Citations and explanations

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see separate sheet

**Cited Documents:**

- D1: WO 98/58510 A (RITTER RUDOLF ;SWISSCOM AG (CH)) 23 December 1998 (1998-12-23)
- D2: US-B-6 367 0141 (HUET CEDRIC ET AL) 2 April 2002 (2002-04-02)
- D3: DE 100 12 057 A (BOSCH GMBH ROBERT) 20 September 2001 (2001-09-20)
- D4: ZHOU L ET AL: "SECURING AD HOC NETWORKS" IEEE NETWORK, IEEE INC. NEW YORK, US, vol. 13, no. 6, November 1999 (1999-11), pages 24-30, XP000875728 ISSN: 0890-8044
- D5: "SPECIFICATION OF THE BLUETOOTH SYSTEM" BLUETOOTH, 1 December 1999 (1999-12-01), XP002175286
- D6: WO 00/76120 A (MUELLER THOMAS ;ROTER MARTIN (DE); NOKIA MOBILE PHONES LTD (FI)) 14 December 2000 (2000-12-14)
- D7: WO 99/59360 A (ERICSSON TELEFON AB L M) 18 November 1999 (1999-11-18)
- D8: US-B-6 308 3171 (WILKINSON TIMOTHY J ET AL) 23 October 2001 (2001-10-23)

**Re Item IV**

**Lack of unity of invention**

The International Preliminary Examining Authority maintains the objection put forward in the International Search Report as to lack of unity (Rule 13 PCT), the reasons for the objection being as follows:

From D3 (column 4, lines 40-55), a method of providing to a client communications device access to a subscription module of a server communications device is known, the method comprising the steps of:

- establishing a communication link between the client communications device and the server communications device; and
- communicating a number of messages comprising data related to the subscription module between the server communications device and the client communications device via the communications link;

With reference to the prior art, the first group of claims (1-12) yields to the potential special technical feature of providing integrity protection of the messages

communicated between the server communications device and the client communications device via the communications link, hence solving the technical problem of avoiding messages corruption by a third party.

With reference to the prior art, the second group of claims (13-22) yields to the potential special technical feature of determining, for at least one of the received messages, whether the message is authorised to address the subscription module. This feature solves the technical problem of ensuring that confidential subscription module information is never accessed by unauthorised entities.

No further potential special technical features are available by means of which a relationship could be established between the subject-matters of the different groups of claims.

Neither the objective problems, underlying the subjects of the two claimed inventions, nor their solutions as defined by the potential special technical features described above allow for the link of a common inventive concept to be established between the said inventions.

In conclusion, the two groups of claims are not linked by common or corresponding special technical features and define two different inventions not linked by a single general inventive concept. The application hence does not meet the requirements of unity of invention as defined in Rule 13(1) and 13(2) of the PCT.

**Re Item V**

**Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. The term "subscription module" in claims 1, 11 and 12 has no unique and well-recognised meaning in the field of network communications. It could be, for example, a software module on a server for processing clients subscription to a service, which is apparently not what is meant by the applicant in the light of the description. "Subscription module" leaves the reader in doubt as to the meaning of the technical features to which it refers, thereby rendering the definition of the subject-matter of said claims unclear (Article 6 PCT). The applicant should have been more specific regarding the nature of the subscription module, using for example the definition already given in the description.

- 2a. The subject-matter of independent claim 1, as far as its clarity allowed it to be understood, is not novel (Article 33(2) PCT). All the technical features of claim 1 are indeed already disclosed in D1:

a method of providing to a client communications device ("SIM-Server 5" in D1, page 9, lines 16-26) access to a subscription module ("SIM-Karte" in D1, page 9, lines 16-26) of a server communications device ("Mobilgerät" in D1, page 9, line 17), the method comprising the steps of:

- establishing a communication link between the client communications device and the server communications device (D1, page 9, lines 16-19); and
- communicating a number of messages comprising data related to the subscription module between the server communications device and the client communications device via the communications link (D1, page 9, lines 19-25);

characterised in that

the method further comprises the step of providing integrity protection of the messages communicated between the server communications device and the client communications device via the communications link ("Authentizität der Information" und "Integrität" in D1, page 9, lines 29-30)

- 2b. The subject-matter of claim 1 is further not novel over the disclosure of document D2; the applicant is referred to the passages cited in the International Search Report (Article 33(2) PCT).
- 2c. If novelty should have been disputed based on some minor difference of interpretation, it is pointed out that the subject-matter of claim 1 would in any case not involve an inventive step (Article 33(3) PCT) having regard to the disclosure of D1 and D2, especially as these documents disclose the same object and the same type of solution as the present application.
- 2d. The subject-matter of claim 1 is further not inventive over the disclosure of document D3.

In accordance with features of claim 1, D3 discloses

a method of providing to a client communications device ("Mobiltelefon 1" in D3, column 4, lines 40-55) access to a subscription module ("SIM-Karte in

Mobiltelefon 2" in D3, column 4, line 51) of a server communications device ("Mobiltelefon 2" in D3, column 4, lines 40-55), the method comprising the steps of:

- establishing a communication link between the client communications device and the server communications device (D3, column 4, lines 42-49); and
- communicating a number of messages comprising data related to the subscription module between the server communications device and the client communications device via the communications link (D3, column 4, lines 50-53);

The subject-matter of claim 1 differs from the disclosure of D3 in that the method further comprises the step of providing integrity protection of the messages communicated between the server communications device and the client communications device via the communications link.

This feature provides a solution to the technical problem of enhancing the security of the data communicated between client and server communications device.

This way of enhancing the security of bluetooth or ad hoc networks connections is however generally known in the art of ad hoc networks, as shown, for instance, in D4 (page 24, right-hand column, line 28 to page 25, left-hand column, line 2).

The skilled person, therefore, being aware of the disclosure of D3 can apply common general knowledge of the art (D4) and arrive at the method of claim 1.

Claim 1 therefore does not involve an inventive step (Article 33(3) PCT)

3. Independent claim 10 is a claim for a system comprising the client and the server of respectively claims 11 and 12. As such, it should have been formulated as dependent on these claims in order to provide a concise formulation of the claims, as it is requested by Article 6 PCT.
4. Independent claim 10 is a claim for a system adapted to perform all the steps of method claim 1.

The arguments set out for the subject-matter of claim 1 (see points 2a-2d above) also apply to the subject-matter of claim 10.

Therefore, as for claim 1, the subject-matter of independent claim 10 is not novel



having regard to D1 or D2 (Article 33(2) PCT), or at least does not involve an inventive step (Article 33(3) PCT- see points 2c and 2d above).

5. Independent claim 11 is a claim for a server communications device corresponding to the server communications device of the system of claim 10.

The arguments set out for the subject-matter of the system of claim 10 (see point 3 above) also apply to parts of this system.

Therefore, as for claim 10, the subject-matter of independent claim 11 is not novel having regard to D1 or D2 (Article 33(2) PCT), or at least does not involve an inventive step (Article 33(3) PCT).

6. Independent claim 12 is a claim for a client communications device corresponding to the client communications device of the system of claim 10.

The arguments set out for the subject-matter of the system of claim 10 (see point 3 above) also apply to parts of this system.

Therefore, as for claim 10, the subject-matter of independent claim 12 is not novel having regard to D1 or D2 (Article 33(2) PCT), or at least does not involve an inventive step (Article 33(3) PCT).

7. The additional features of dependent claims 2-9 add nothing of inventive significance to claim 1, being either features rendered obvious by documents D1, D2, or D3 (alone or in combination with D4 and D6), or features readily apparent to a skilled person based on his common general knowledge of the art (Articles 33(2) and 33(3) PCT).

Following deficiencies should also have been removed:

- a. Contrary to the requirements of Rule 5.1(a) (ii) PCT, the relevant background art disclosed in documents D1, D2, D3 and D4 is not mentioned in the description, nor are these documents identified therein.
- b. In the introductory part of the description, the statements indicating the technical problem to be solved should have been revised with reference to the relevant prior art documents D1, D2, D3 and D4 cited above (Rule 5.1(a)(iii) PCT and PCT

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Guidelines II-4.6).

- c. As requested by the Applicant, a preliminary examination has been conducted for the subject-matter relating to claims 1-12.
- In order to allow the conformity of the description with the claims, as required by Rule 5.1(a)(iii) PCT, the Applicant should have excised from the claims and from the description the parts corresponding to other subject-matters than the one disclosed in the examined claims.